

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Withdrawn-Currently Amended): ~~Antenna~~ An antenna arrangement (1, 1', 1'') for transmitting and receiving electromagnetic signals, the antenna arrangement [(1)] comprising:

[-] a flat carrier substrate [(2)] made of a dielectric material,

[-] a first conducting track (32, 320, 320') applied to a first surface of the carrier substrate [(2)], the first conducting track ~~possessing~~ including at one end a point of contact ~~so as to gather thereat or inject thereat~~ the signals and a first dipole (50, 51) at ~~[[the]]~~ an opposite end,

[-] a second conducting track [(42)] applied to ~~the other~~ a second surface of the carrier substrate opposite from the first surface [(2)], wherein

[-] the second conducting track (42, 420, 420') ~~possessing~~ includes at one end a point of contact ~~so as to gather thereat or inject thereat~~ the signals and a second dipole (60, 61) at ~~[[the]]~~ an opposite end,

[-] the first and the second dipoles (50, 51, 60, 61) ~~forming~~ form a crossed dipole.

Claim 2 (Currently Amended): ~~Antenna arrangement~~ (1, 1', 1'') The glazing according to claim [(1)] 10, ~~characterized in that~~ wherein a $\lambda/4$ transformer [(7)] is disposed between the dipoles (50, 51, 60, 61) and the conducting tracks (32, 320, 320', 42, 420, 420').

Claim 3 (Currently Amended): ~~Antenna arrangement~~ (1, 1', 1'') The glazing according to ~~one of claims 1 or 2~~ claim 2, ~~characterized in that the zone of~~ wherein the ~~conducting tracks~~ (32, 320, 320', 42, 420, 420') ~~which is linked to a~~ $\lambda/4$ transformer [(7)] is ~~embodied~~ in the form of a strip line [(31)].

Claim 4 (Currently Amended): ~~Antenna arrangement (1, 1', 1'')~~ The glazing according to claim 3, ~~characterized in that~~ wherein the conducting tracks (~~32, 320, 320', 42, 420, 420'~~) between the strip line (~~31~~) ~~exhibit~~ have different widths.

Claim 5 (Currently Amended): ~~Antenna arrangement (1, 1', 1'')~~ The glazing according to claim 4, ~~characterized in that~~ wherein a transition line with a gradual adaptation of the width is disposed between the conducting tracks ~~asymmetric lines~~ (~~32, 320, 320', 42, 420, 420'~~) and the strip line ~~[(31)]~~.

Claim 6 (Currently Amended): ~~Antenna arrangement (1, 1', 1'')~~ The glazing according to ~~one of the preceding claims~~ claim 10, ~~characterized in that~~ wherein a conducting track acting as a shielding line (~~8, 80, 9, 90~~) is disposed above the first conducting track (~~320, 320'~~) and below the second conducting track (~~420, 420'~~).

Claim 7 (Currently Amended): ~~Antenna arrangement (1, 1', 1'')~~ The glazing according to ~~one of the preceding claims~~ claim 10, ~~characterized in that~~ wherein the conducting tracks (~~32, 320, 320', 42, 420, 420', 7, 8, 80, 9, 90~~) are made of copper.

Claim 8 (Currently Amended): ~~Antenna arrangement (1, 1', 1'')~~ The glazing according to ~~one of the preceding claims~~ claim 10, ~~characterized in that~~ wherein the carrier substrate ~~[(2)]~~ is a flexible film, ~~preferably made of polyimide~~.

Claim 9 (Currently Amended): ~~Antenna arrangement (1'')~~ The glazing according to ~~one of the preceding claims~~ claim 10, ~~characterized in that~~ wherein an electronic circuit (~~10~~)

~~intended~~ to convert the high-frequency signal signals into lower-frequency signal signals is disposed on the carrier substrate ~~[[2]]~~.

Claim 10 (Currently Amended): ~~Glazing furnished with an~~ A glazing, comprising:
a substantially transparent monolithic pane; and
an antenna arrangement according to one of Claims 1 to 9, characterized in that the
glazing is an essentially transparent monolithic pane and the antenna arrangement is that
transmits and receives electromagnetic signals and is disposed on the glazing, the antenna
arrangement comprising:

a flat carrier substrate made of a dielectric material;

a first conducting track applied to a first surface of the carrier substrate, the
first conducting track including at one end a point of contact to gather or inject the
signals and a first dipole at an opposite end; and

a second conducting track applied to a second surface of the carrier substrate
opposite from the first surface, the second conducting track including at one end a
point of contact to gather or inject the signals and a second dipole at an opposite end,
wherein the first and the second dipoles form crossed dipoles.

Claim 11 (Currently Amended): ~~Glazing~~ The glazing according to claim 10,
~~characterized in that wherein~~ the glazing is ~~furnished with~~ includes a coating or ~~[[with]]~~ a
layer ~~reflecting that reflects~~ electromagnetic waves, and ~~the zone~~ a portion of the antenna
arrangement ~~containing~~ including the dipoles is disposed ~~further towards the~~ on an outside
~~[[than]]~~ of the said ~~reflecting~~ coating or layer.

Claim 12 (Currently Amended): ~~Glazing (100) furnished with an~~ A glazing,
comprising:
a substantially transparent multilayer pane; and
an antenna arrangement (1) according to one of Claims 1 to 9, characterized in that
the glazing is an essentially transparent multilayer pane and the antenna arrangement (1) is
fixed on the glazing that transmits and receives electromagnetic signals and is disposed on the
glazing, the antenna arrangement comprising:

a flat carrier substrate made of a dielectric material;
a first conducting track applied to a first surface of the carrier substrate, the
first conducting track including at one end a point of contact to gather or inject the
signals and a first dipole at an opposite end; and
a second conducting track applied to a second surface of the carrier substrate
opposite from the first surface, the second conducting track including at one end a
point of contact to gather or inject the signals and a second dipole at an opposite end,
wherein the first and the second dipoles form crossed dipoles.

Claim 13 (Currently Amended): ~~Glazing (100)~~ The glazing according to claim 12,
~~characterized in that wherein~~ the glazing is ~~furnished with~~ includes a coating or ~~[[with]]~~ a
layer ~~reflecting that reflects~~ reflects electromagnetic waves and ~~the zone~~ a portion of the antenna
arrangement (1) ~~containing~~ including the dipoles (50 to 61) is disposed ~~further towards the~~ on
an outside ~~[[than]]~~ of the ~~said reflecting~~ coating or layer.

Claim 14 (Currently Amended): ~~Glazing (100)~~ The glazing including the ~~furnished~~
~~with an~~ antenna arrangement ~~[[(1)]]~~ according to ~~one of claims 1 to 9~~ claim 12, characterized
~~in that wherein~~ the glazing is ~~an essentially~~ a substantially transparent multilayer pane and at

least a part ~~[[(16)]]~~ of the antenna arrangement ~~[[(1)]]~~ is disposed between two ~~of the~~ layers ~~(101, 102)~~ of the glazing.

Claim 15 (Currently Amended): ~~Glazing (100)~~ The glazing including the ~~furnished with an~~ antenna arrangement ~~[[(1)]]~~ according to ~~one of claims 1 to 9~~ claim 12, characterized ~~in that wherein~~ the glazing is ~~an essentially~~ a substantially transparent multilayer pane, ~~which is furnished with including~~ a coating or ~~[[with]]~~ a layer reflecting electromagnetic waves ~~(103)~~ and ~~the zone (16)~~ a portion of the antenna arrangement ~~(1)~~ ~~containing including~~ the dipoles is disposed between the coating or the reflecting layer and ~~[[the]]~~ an internal face of ~~one of the layers (101) of the glazing, the so-called external layer, and intended to be the an~~ outermost layer of the glazing.

Claim 16 (Currently Amended): ~~Glazing~~ The glazing according to ~~one of claims 10 to 15~~ claim 10, characterized ~~in that: wherein~~

~~[[-]]~~ ~~the zone~~ a portion of the antenna arrangement ~~[[with]]~~ including the dipoles is mounted on one of the free main surfaces of the glazing,

~~[[-]]~~ ~~the zone~~ a portion of the antenna arrangement ~~with the including~~ points of contact ~~intended to gather and/or or~~ to inject the signals is mounted on ~~[[the]]~~ an other main surface of the glazing, and

~~[[-]]~~ the carrier substrate is passed around ~~[[the]]~~ a peripheral surface of the glazing.

Claim 17 (Currently Amended): ~~Glazing (100)~~ The glazing according to ~~one of~~ ~~claims 14 or 15~~ claim 12, characterized ~~in that wherein~~

~~[[-]]~~ ~~the zone (16)~~ a portion of the antenna arrangement ~~(1)~~ ~~with including~~ the dipoles ~~(50, 51, 60, 61)~~ is disposed between two of the layers ~~(101, 102)~~ of the glazing,

- [[-]] ~~the zone (17)~~ a portion of the antenna arrangement ~~(1)~~ with including the points of contact ~~intended~~ to gather ~~and/or~~ or to inject the signals is mounted on one of the two free main surfaces of the glazing ~~(102)~~, and
- [[-]] the carrier substrate ~~[(2)]~~ is passed around ~~[[the]]~~ a peripheral surface of at least one of the layers ~~(102)~~ of the glazing.

Claim 18 (Currently Amended): ~~Glazing (100)~~ The glazing according to ~~one of claims 16 or 17~~ claim 10, ~~characterized in that wherein~~ the peripheral surface of the glazing ~~or at least one of its layers~~, in the ~~zone of the contact with~~ portion contacting the carrier substrate ~~[(2)]~~, ~~is furnished with~~ includes a hollow ~~or with a recess [(105)]~~ with respect to ~~[[the]]~~ a continuous edge of the peripheral surface.

Claim 19 (Currently Amended): ~~Glazing~~ The glazing according to claim 18, ~~characterized in that the~~ wherein circuit components disposed on the carrier substrate are housed while being protected in ~~the space of the hollow or of the recess~~.

Claim 20 (Currently Amended): ~~Glazing~~ The glazing according to ~~one of claims 18 or 19~~ claim 18, ~~characterized in that the hollow or~~ wherein the recess is filled with a sealing mass.

Claim 21 (New): The glazing according to claim 10, wherein the first and the second dipoles are perpendicular to one another.

Claim 22 (New): The glazing according to claim 10, wherein the first and the second dipoles include shifted bases and form a diamond shape.

Claim 23 (New): The glazing according to claim 6, wherein the conducting tracks and the dipoles are integrated in the substrate.

Claim 24 (New): The glazing according to claim 6, wherein the conducting tracks and the dipoles are disposed on the substrate.

Claim 25 (New): The glazing according to claim 10, wherein the substrate includes a plurality films or panes disposed one above another.

Claim 26 (New): The glazing according to claim 12, wherein a $\lambda/4$ transformer is disposed between the dipoles and the conducting tracks.

Claim 27 (New): The glazing according to claim 26, wherein the $\lambda/4$ transformer is in the form of a strip line.

Claim 28 (New): The glazing according to claim 27, wherein the conducting tracks between the strip line have different widths.

Claim 29 (New): The glazing according to claim 28, wherein a transition line with a gradual adaptation of the width is disposed between the conducting tracks and the strip line.

Claim 30 (New): The glazing according to claim 12, wherein a conducting track acting as a shielding line is disposed above the first conducting track and below the second conducting track.

Claim 31 (New): The glazing according to claim 12, wherein the conducting tracks are made of copper.

Claim 32 (New): The glazing according to claim 12, wherein the carrier substrate is a flexible film.

Claim 33 (New): The glazing according to claim 12, wherein an electronic circuit to convert the high-frequency signal signals into lower-frequency signal signals is disposed on the carrier substrate.

Claim 34 (New): The glazing according to claim 12, wherein
a portion of the antenna arrangement including the dipoles is mounted on one of the free main surfaces of the glazing,
a portion of the antenna arrangement including points of contact to gather or to inject the signals is mounted on an other main surface of the glazing, and
the carrier substrate is passed around a peripheral surface of the glazing.

Claim 35 (New): The glazing according to claim 12, wherein the peripheral surface of the glazing, in the portion contacting the carrier substrate, includes a recess with respect to a continuous edge of the peripheral surface.

Claim 36 (New): The glazing according to claim 35, wherein circuit components disposed on the carrier substrate are housed while being protected in the recess.

Claim 37 (New): The glazing according to claim 35, wherein the recess is filled with a sealing mass.

Claim 38 (New): The glazing according to claim 12, wherein the first and the second dipoles are perpendicular to one another.

Claim 39 (New): The glazing according to claim 12, wherein the first and the second dipoles include shifted bases and form a diamond shape.

Claim 40 (New): The glazing according to claim 30, wherein the conducting tracks and the dipoles are integrated in the substrate.

Claim 41 (New): The glazing according to claim 30, wherein the conducting tracks and the dipoles are disposed on the substrate.

Claim 42 (New): The glazing according to claim 12, wherein the substrate includes a plurality films or panes disposed one above another.

Claim 43 (Currently Amended): The glazing according to claim 10, wherein the carrier substrate is a flexible film made of polyimide.

Claim 44 (Currently Amended): The glazing according to claim 12, wherein the carrier substrate is a flexible film made of polyimide.